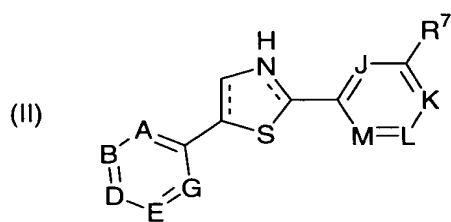
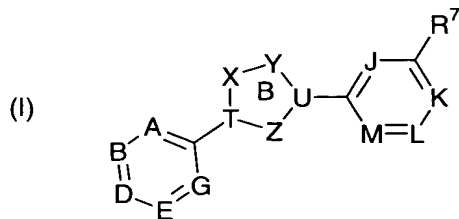


CLAIMS

What Is Claimed Is:

1. A compound according to structural formula (I) or (II):



5

or a pharmaceutically acceptable salt, hydrate, solvate or N-oxide thereof,

wherein:

the B ring is an aromatic or nonaromatic ring that includes from one to four heteroatoms, wherein

- 10 X, Y, Z are each, independently of one another selected from C, CH, N, NR¹⁶, NR¹⁸, S or O, provided that X and Y are not both O;

U and T are each, independently of one another, selected from C, CH or N;

Z is N or -CH-;

A is N or -CR²-;

- 15 B is N or -CR³-;

D is N or -CR⁴-;

E is N or -CR⁵-;

G is N or -CR⁶-;

J is N or $-\text{CR}^{14}-$;

K is N or $-\text{CR}^8-$;

L is N or $-\text{CR}^9-$;

M is N or $-\text{CR}^{10}-$;

5 R^2 and R^6 are each, independently of one another, selected from the group consisting of hydrogen, halo, fluoro, chloro, alkyl, methyl, substituted alkyl, alkylthio, substituted alkylthio, alkoxy, methoxy, *i*-propoxy, substituted alkoxy, alkoxycarbonyl, substituted alkoxycarbonyl, arylalkyloxycarbonyl, substituted arylalkyloxycarbonyl, aryloxycarbonyl, substituted aryloxycarbonyl, cycloheteroalkyl, substituted
10 cycloheteroalkyl, carbamoyl, substituted carbamoyl, haloalkyl, trifluoromethyl, sulfamoyl, substituted sulfamoyl and silyl ethers, provided that one of R^2 and R^6 is other than hydrogen;

R^3 and R^5 are each, independently of one another, selected from the group consisting of hydrogen, halo, chloro, alkyl, substituted alkyl, alkylthio, substituted
15 alkylthio, alkoxy, substituted alkoxy, alkoxycarbonyl, substituted alkoxycarbonyl, arylalkyloxycarbonyl, substituted arylalkyloxycarbonyl, aryloxycarbonyl, substituted aryloxycarbonyl, cycloheteroalkyl, substituted cycloheteroalkyl, carbamoyl, substituted carbamoyl, haloalkyl, sulfamoyl and substituted sulfamoyl;

R^4 is selected from the group consisting of hydrogen, halo, alkyl,
20 substituted alkyl, alkylthio, substituted alkylthio, carbamoyl, substituted carbamoyl, alkoxy, substituted alkoxy, alkoxycarbonyl, substituted alkoxycarbonyl, arylalkyloxycarbonyl, substituted arylalkyloxycarbonyl, aryloxycarbonyl, substituted aryloxycarbonyl, dialkylamino, substituted dialkylamino, haloalkyl, sulfamoyl and substituted sulfamoyl;

25 R^7 is $-\text{NR}^{11}\text{C}(\text{O})\text{R}^{12}$;

R^8 , R^9 , R^{10} and R^{14} are each, independently of one another, hydrogen, halo or fluoro;

R^{11} is hydrogen, alkyl or methyl; and

R¹² is selected from the group consisting of substituted alkyl, haloalkyl, halomethyl, dihalomethyl, dichloromethyl, cycloheteroalkyl and substituted cycloheteroalkyl;

R¹⁶ and R¹⁸ are each, independently of one another, selected from the
5 group consisting of hydrogen, lower alkyl, substituted lower alkyl, lower heteroalkyl, substituted lower heteroalkyl, cycloalkyl, substituted cycloalkyl, cycloheteroalkyl, substituted cycloheteroalkyl, lower haloalkyl, monohalomethyl, dihalomethyl, trihalomethyl, trifluoromethyl, lower alkylthio, substituted lower alkylthio, lower alkoxy, substituted lower alkoxy, methoxy, substituted methoxy, lower heteroalkoxy, substituted
10 lower heteroalkoxy, cycloalkoxy, substituted cycloalkoxy, cycloheteroalkoxy, substituted cycloheteroalkoxy, lower haloalkoxy, monohalomethoxy, dihalomethoxy, trihalomethoxy, trifluoromethoxy, lower di- or monoalkylamino, substituted lower di- or monoalkylamino, aryl, substituted aryl, aryloxy, substituted aryloxy, phenoxy, substituted phenoxy, arylalkyl, substituted arylalkyl, arylalkyloxy, substituted arylalkyloxy, benzyl,
15 benzyloxy, heteroaryl, substituted heteroaryl, heteroaryloxy, substituted heteroaryloxy, heteroarylalkyl, substituted heteroarylalkyl, heteroarylalkyloxy, substituted heteroarylalkyloxy, carboxyl, lower alkoxycarbonyl, substituted lower alkoxycarbonyl, aryloxy carbonyl, substituted aryloxy carbonyl, arylalkyloxy carbonyl, substituted arylalkyloxy carbonyl, carbamate, substituted carbamate, carbamoyl, substituted
20 carbamoyl, sulfamoyl, substituted sulfamoyl and a group of the formula -L-R¹⁷, where "L" is a linker and R¹⁷ is cycloalkyl, substituted cycloalkyl, cycloheteroalkyl or substituted cycloheteroalkyl.

with the provisos that:

- 25 (i) at least one of A, B, D, E, G, J, K, L or M is N;
- (ii) no more than one of A, B, D, E or G is N; and
- (iii) no more than one of J, K, L or M is N.

2. The compound of Claim 1 in which one of A, B, D, E or G is N and one of J, K, L or M is N.

3. The compound of Claim 1 in which one of A, B, D, E or G is N and none of J, K, L or M is N.

4. The compound of Claim 1 in which none of A, B, D, E or G is N and one of J, K, L or M is N.

5 5. The compound of Claim 1 in which the B-ring is an oxazole or hydro isomer thereof.

6. The compound of Claim 1 in which the B ring is a thiazole or a hydro isomer thereof.

10 7. The compound of Claim 1 in which the B ring is an imidazole or a hydro isomer thereof.

8. The compound of Claim 1 in which the B ring is a triazole or a hydro isomer thereof.

9. The compound of Claim 1 in which the B ring is an oxadiazole or a hydro isomer thereof.

15 10. The compound of Claim 1 in which the B ring is an isoxazole or a hydro isomer thereof.

11. The compound of Claim 1 in which the B ring is a pyrazole or a hydro isomer thereof.

20 12. The compound of Claim 1 in which the B ring is a thiadiazole or a hydro isomer thereof.

13. The compound of any one of Claims 1-12 in which R^7 is $-NR^{11}C(O)R^{12}$, wherein R^{11} is hydrogen or methyl and R^{12} is $-CHCl_2$.

14. The compound of Claim 13 in which X is N, Y is O and Z is $-CH-$.

25 15. The compound of any one of Claims 1- 13 in which A is $-CR^2-$, G is $-CR^6-$, R^7 is $-NR^{11}C(O)R^{12}$, where R^{11} is hydrogen or methyl and R^{12} is $-CHCl_2$.

16. The compound of Claim 15 in which B is $-\text{CR}^3-$, D is N, E is $-\text{CR}^5-$, J is $-\text{CR}^{14}-$, K is $-\text{CR}^8-$, L is $-\text{CR}^9-$, M is $-\text{CR}^{10}-$, and R^3 , R^5 , R^9 , R^{10} and R^{14} are each hydrogen.
17. The compound of Claim 16 in which R^8 is fluorine.
- 5 18. The compound of Claim 15 in which B is $-\text{CR}^3-$, D is $-\text{CR}^4-$, E is $-\text{CR}^5-$, J is $-\text{CR}^{14}-$, K is $-\text{CR}^8-$, L is $-\text{CR}^9-$, M is N and R^3 , R^4 , R^5 , R^8 , R^9 and R^{14} are each hydrogen.
19. The compound of Claim 15 in which B is $-\text{CR}^3-$, D is $-\text{CR}^4-$, E is $-\text{CR}^5-$, J is $-\text{CR}^{14}-$, K is $-\text{CR}^8-$, L is N, M is $-\text{CR}^{10}-$ and R^3 , R^4 , R^5 , R^8 , R^{10} and R^{14} are each hydrogen.
- 10 20. The compound of any one of Claims 15-19 in which R^2 and R^6 are each, independently of one another, selected from the group consisting of chloro, fluoro, methyl, trifluoromethyl, thiomethyl, methoxy, *i*-propoxy, N-morpholino and N-morpholinosulfamoyl.
21. The compound of any one of Claims 15-19 in which R^2 and R^6 are each, independently of one another, selected from the group consisting of chloro, fluoro, methyl, trifluoromethyl, methoxy or *i*-propoxy.
- 15 22. The compound of any one of Claims 15-19 in which R^2 and R^6 are each the same or different halo.
23. The compound of any one of Claims 15-19 in which X is N, Y is O and Z is $-\text{CH}-$.
- 20 24. The compound of Claim 1 in which A is $-\text{CR}^2-$, G is $-\text{CR}^6-$ and R^7 is $-\text{NR}^{11}\text{C}(\text{O})\text{R}^{12}$, where R^{11} is hydrogen or methyl and R^{12} is $-\text{CH}_2\text{I}$.
- 25 25. The compound of Claim 24 in which R^2 and R^6 are each, independently of one another, selected from the group consisting of chloro, fluoro, methyl, trifluoromethyl, thiomethyl, methoxy, *i*-propoxy, N-morpholino and N-morpholinosulfamoyl.
26. The compound of Claim 24 in which R^2 and R^6 are each, independently of one another, selected from the group consisting of chloro, fluoro, methyl, trifluoromethyl, methoxy and *i*-propoxy.

27. The compound of Claim 24 in which R^2 and R^6 are each the same or different halo.

28. The compound of Claim 24 in which X is N, Y is O and Z is -CH-.

29. The compound of Claim 1 in which A is $-CR^2-$, B is $-CR^3-$, R^7 is
5 $-NR^{11}C(O)R^{12}$, where R^{11} is hydrogen or methyl and R^{12} is $-CHCl_2$.

30. The compound of Claim 29 in which D is $-CR^4-$, G is $-CR^6-$, E is $-CR^5-$, J is $-CR^{14}-$, K is $-CR^8-$, L is $-CR^9-$, M is N and R^4 , R^5 , R^6 , R^8 , R^9 and R^{14} are each hydrogen.

31. The compound of Claim 29 in which D is $-CR^4-$, G is $-CR^6-$, E is $-CR^5-$, J
10 is $-CR^{14}-$, K is $-CR^8-$, L is N, M is $-CR^{10}-$ and R^4 , R^5 , R^6 , R^8 , R^{10} and R^{14} are each hydrogen.

32. The compound of any one of Claims 29-31 in which R^2 is chloro, fluoro, methyl, trifluoromethyl, thiomethyl, methoxy, *i*-propoxy, N-morpholino or N-morpholinosulfamoyl and R^3 is chloro, fluoro, methyl, trifluoromethyl or methoxy

15 33. The compound of any one of Claims 29-31 in which R^2 is chloro, fluoro, methyl, trifluoromethyl or methoxy and R^3 is chloro, fluoro or trifluoromethyl.

34. The compound of any one of Claims 29-31 in which R^2 and R^3 are each the same or different halo.

20 35. The compound of any one of Claims 29-31 in which X is N, Y is O and Z is -CH-.

36. The compound of Claim 1 in which A is $-CR^2-$, G is $-CR^6-$ and R^2 and R^6 are each identical, provided that R^2 and R^6 are not hydrogen.

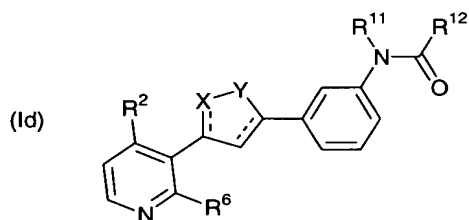
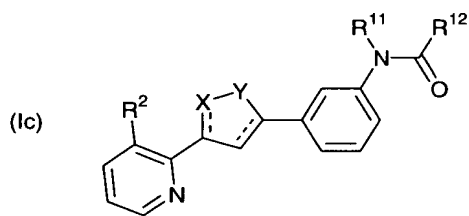
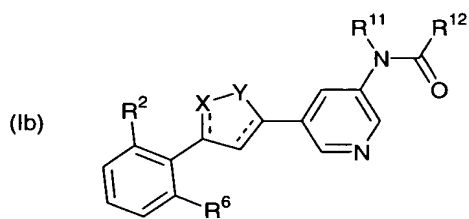
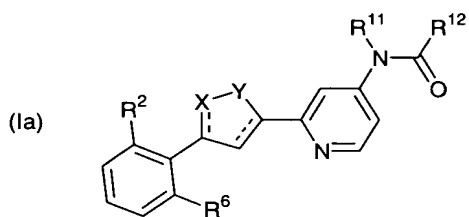
37. The compound of Claim 1 in which A is $-CR^2-$, B is $-CR^3-$ and R^2 and R^3 are each identical, provided that R^2 and R^3 are not hydrogen.

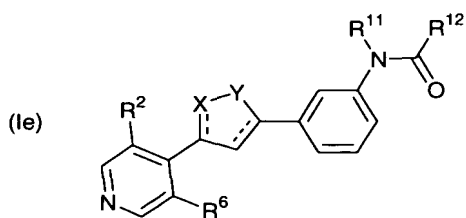
25 38. The compound of Claim 1 in which B is $-CR^3-$, E is $-CR^5-$ and R^3 and R^5 are each identical, provided that R^3 and R^5 are not hydrogen.

39. The compound of Claim 1 in which B is $-\text{CR}^3-$, D is $-\text{CR}^4-$, E is $-\text{CR}^5-$, J is $-\text{CR}^{14}-$, K is $-\text{CR}^8-$ and R^3 , R^4 , R^5 , R^8 and R^{14} are each hydrogen.

40. The compound of Claim 1 in which -D is $-\text{CR}^4-$, E is $-\text{CR}^5-$, G is CR^6 , J is $-\text{CR}^{14}-$, K is $-\text{CR}^8-$ and R^4 , R^5 , R^6 , R^8 and R^{14} are each hydrogen.

5 41. The compound of Claim 1 which has the structural formula (Ia), (Ib), (Ic), (Id) or (Ie):



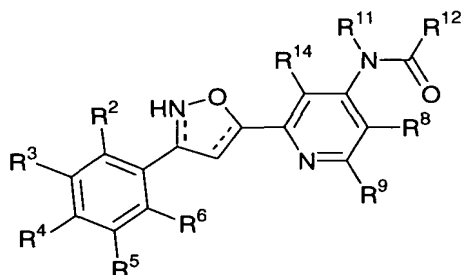


or pharmaceutically acceptable salts, hydrates or solvates thereof, wherein X, Y, R², R⁶, R¹¹ and R¹² are as previously defined for Claim 1 and --- represents a single or
5 double bond.

42. The compound of Claim 41 in which R¹¹ is hydrogen, R¹² is dichloromethyl and R² and R⁶ are each, independently of one another, selected from the group consisting of halo, fluoro, chloro, trifluoromethyl and methoxy.

43. The compound of Claim 1 which has the structural formula (If):

10



or pharmaceutically acceptable salts, hydrates or solvates thereof, wherein R², R³, R⁴, R⁵, R⁶, R⁸, R⁹, R¹¹, R¹² and R¹⁴ are as previously defined for Claim 1 and subject to the same provisos and --- represents a single or double bond.

15

44. A compound selected from the group of compounds depicted in FIG. 1, which inhibits HCV replication and/or proliferation with an IC₅₀ of 100μM or less, as measured in an *in vitro* assay.

45. The compound of Claim 44 which has an IC₅₀ of 10μM or less.

20

46. A method of inhibiting replication or proliferation of a hepatitis C ("HC") virion, comprising the step of contacting a HC virion with an amount of a compound of any one of Claims 1- 12 effective to inhibit replication of the HC virion.

47. The method of Claim 46 which is practiced *in vitro*.
48. The method of Claim 46 which is practiced *in vivo*.
49. A method of treating or preventing an HCV infection, comprising the steps of administering to a subject an effective amount of a compound of any one of Claims 1-
5 12 effective to treat or prevent an HCV infection.
50. The method of Claim 49, wherein the subject is a human.
51. The method of Claim 49, wherein the compound is administered in an amount of 0.1 mg/kg to 200 mg/kg.
52. The method of Claim 49, wherein the compound is administered in an
10 amount of 10 mg/kg to 100 mg/kg.
53. The method of Claim 49, wherein the compound is administered orally.
54. The method of Claim 49, wherein the compound is administered by injection.
55. The method of Claim 49, wherein the compound is selected from the
15 group of compounds depicted in FIG. 1 and which inhibits HCV replication and/or proliferation with an IC₅₀ of about 10μM or less, as measured in an *in vitro* assay.
56. The method of Claim 49 which is practiced therapeutically in a subject having an HCV infection.
57. The method of Claim 49 which is practiced prophylactically in a subject at
20 risk of developing an HCV infection.
58. A composition comprising a compound of any one of Claims 1-12 and a pharmaceutically acceptable vehicle.